

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-38 (cancelled).

Claim 39 (currently amended): Apparatus for bonding soft biological tissue having an incision therein, comprising:

forceps having first and second opposed arms mounted in a sleeve, the opposed arms being adapted to grip a portion of the tissue on both sides of the incision, the forceps having a pair of opposed arms mounted in sleeve at one end, and having another end configured for grasping between the opposed tips of said arms;

electrodes secured to tips of the opposed arms of said forceps, the electrodes being configured to grasp for contacting said tissue portion; and

an adjustable stop member mounted on an inside surface of the first opposed arm, the adjustable stop member being adapted to contact the second opposed arm, and when in contact to limit that limits the extent to which the forceps may be deformed;

a protuberance with a recessed surface for receiving a finger for clamping the forceps, the protuberance being located on an outside surface of one of the two opposed arms directly opposite the adjustable stop member;

the adjustable stop member preventing and prevents overexertion of pressure on grasped tissue by limiting the maximum force transferred to the tissue, despite increased pressure exerted on the forceps by a user, the stop member being adjustable to accommodate the bonding of tissues of varying thicknesses to provide tissue welding that forms a weld to reconnect the tissue.

Claim 40 (currently amended): A method for bonding soft biological tissue comprising:

~~selecting an~~ The apparatus as claimed in of claim 39 having, wherein said
electrodes ~~that~~ are dimensioned to have a volume which is at least 5 times that of the
tissue portion volume;

applying the apparatus to soft biological tissue having an incision therein; and
applying power to the apparatus to bond the soft biological tissue.

Claim 41 (currently amended): The apparatus of claim 39-40, wherein said
electrodes are made of a metal with a high heat conductivity.

Claims 42-65 (canceled).

Claim 66 (previously presented): The apparatus of claim 39, wherein the
adjustable stop member comprises a replaceable lug of selectable length positioned
between the two forceps.

Claim 67 (currently amended): The apparatus of claim 39, wherein the adjustable
stop member comprises a lug and one or more spacers positionable between the lug and
the inside surface of the first opposed arm to accommodate the bonding of tissues of
varying thicknesses.

Claim 68 (original): The apparatus of claim 39, wherein the adjustable stop
member comprises an adjustable knob.

Claim 69 (currently amended): The apparatus of claim 39, wherein the stop
member ~~means~~ further comprises an electromagnetic drive that is operable to change the
effective length of the stop member to enable an increase in tissue clamping force.

Claim 70 (previously presented): The apparatus of claim 69, wherein the
electromagnetic drive is controlled by a computer.

Claim 71 (currently amended): Apparatus for bonding soft biological tissue having an incision therein, comprising:

forceps having first and second opposed arms mounted in a sleeve, the opposed arms being adapted to grip a portion of the tissue on both sides of the incision, the forceps having a pair of opposed arms mounted in sleeve at one end, and having another end configured for grasping between the opposed tips of said arms;

electrodes secured to tips of the opposed arms of said forceps, the electrodes being configured to grasp for contacting said tissue portion and provide tissue welding that forms a weld to reconnect the tissue; and

a lug that is removably mounted to an inside surface of the first opposed arm, the lug being adapted to contact the second opposed arm, and when in contact to limit stop means for selectively limiting the extent to which the forceps may be deformed to provide tissue welding that forms a weld to reconnect the tissue, the lug stop means further preventing the overexertion of pressure on grasped tissue by limiting the maximum force transferred to the tissue, despite increased pressure exerted on the forceps by a user.

Claim 72 (cancelled).

Claim 73 (currently amended): The apparatus of claim 71, further comprising wherein the stop means comprises one or more spacers positionable between the lug and the inside surface of the first opposed arm to accommodate the bonding of tissues of varying thicknesses.

Claim 74 (currently amended): The apparatus of claim 71, further comprising wherein the stop means comprises an adjustable knob mounted on the outside surface of the first opposed arm opposite the lug.

Claims 75-78 (withdrawn).

Claim 79 (new): The apparatus of claim 74, wherein the adjustable knob has a recessed surface for receiving a finger for clamping the forceps, the protuberance being located on an outside surface of one of the two opposed arms directly opposite the adjustable stop member.